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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,398

09/19/2003

Douglas S. Ransom

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BRINKS HOFER GILSON & LIONE/PML

PO BOX 10395

CHICAGO, IL 60610

EXAMINER

VON BUHR, MARIA N

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/666,398	Applicant(s) RANSOM ET AL.	
	Examiner M.N. VON BUHR	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008 and 19 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 92-97, 100-106, 109-115 and 118-124 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 92-97, 100-106, 109-115 and 118-124 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080519</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Examiner acknowledges receipt of Applicant's response to the previous Office action, received 26 February 2008; which amends claims 92, 96, 101, 105, 110, 114, 118 and 122, and cancels claims 98, 99, 107, 108, 116 and 117. Claims 92-97, 100-106, 109-115 and 118-124 remain pending in this application.
2. Examiner acknowledges receipt of Applicant's information disclosure statement, received 19 May 2008. This submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, it has been taken into consideration for this Office action.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. In response to Applicant's amendment, the previously presented non-statutory double patenting rejections of various claims are deemed to have been overcome and are, therefore, withdrawn.
5. Claims 92-94, 96 and 100 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 27, 43, 57, 59-61, 75, 80 and 82 of U.S. Patent No. 6,961,641 in view of Eidson (U.S. Patent Application Publication No. 2004/0203868; newly cited).

Claims 1, 27, 43, 57, 59-61, 75, 80 and 82 of U.S. Patent No. 6,961,641 contain every element of claims 92-94, 96 and 100 of the instant application, except for the limitations "wherein said processor further is operative to determine a geographical location of said energy management device" and "wherein said power management data may be authenticated based on said geographical location." In this regard, Eidson teaches "a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters" (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system for the measurements of the system claimed in U.S. Patent No. 6,961,641, because Eidson teaches a resultant increased reliability and security of the measurement system.
6. Claims 118 and 119 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 6 of U.S. Patent No. 6,990,395 in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

Claims 1, 2 and 6 of U.S. Patent No. 6,990,395 contain every element of claims 118 and 119 of the instant application, except for the limitations “wherein said processor further is operative to determine a geographical location of said energy management device” and “wherein said power management data may be authenticated based on said geographical location.” In this regard, Eidson teaches “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system for the measurements of the system claimed in U.S. Patent No. 6,990,395, because Eidson teaches a resultant increased reliability and security of the measurement system.

7. Claims 118, 120 and 124 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 4, 10, 12 and 15 of U.S. Patent No. 7,248,978 in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

Claims 1, 4, 10, 12 and 15 of U.S. Patent No. 7,248,978 contain every element of claims 118, 120 and 124 of the instant application, except for the limitations “wherein said processor further is operative to determine a geographical location of said energy management device” and “wherein said power management data may be authenticated based on said geographical location.” In this regard, Eidson teaches “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system for the measurements of the system claimed in U.S. Patent No. 7,248,978, because Eidson teaches a resultant increased reliability and security of the measurement system.

8. Claims 118 and 122 are provisionally rejected on the ground of non-statutory double patenting over claims 14-17 of co-pending U.S. Application Serial No. 11/497,218 in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

Claims 14-17 of co-pending U.S. Application Serial No. 11/497,218 contain every element of claims 118 and 122 of the instant application, except for the limitations “wherein said processor further is operative to determine a geographical location of said energy management device” and “wherein said power management data may be authenticated based on said geographical location.” In this regard, Eidson teaches “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system for the measurements of the system claimed in U.S. Application Serial No. 11/497,218, because Eidson teaches a resultant increased reliability and security of the measurement system.

9. In response to Applicant’s amendment and remarks, concerning the 35 U.S.C. §102(e) rejection of claims 118 and 119, as being clearly anticipated by Leach (U.S. Patent No. 6,954,814), Examiner notes the following:

a. As presented in the previous Office action, Leach discloses a “method and system for monitoring utility meter status, and transmitting a status message via an output device connected to a universal communications interface ... The system is connected to a utility meter, such as an electric meter. The voltage level of the electric meter is monitored through a voltage input interface. An analog-to-digital converter transforms the voltage waveform into a series of digital data packets, which are then transmitted to a microprocessor ... the microprocessor transmits a status message across a universal serial bus to a universal communications interface. The universal communications interface is connected to at least one slot, which contains at least one output device ... The output device may then transmit the status message to a remote receiver” (the abstract), wherein the universal communications interface, analogous to the instantly claimed “network interface,” provides for wireless communication (see, at least, col. 3, lines 33-48; col. 4, lines 15-32; col. 5, lines 20-30). Examiner notes that the effective filing date of Leach (10 June 1999) predates the effective filing date of the instant application (22 March 2001), as supported by Applicant’s remarks in the response dated 20 September 2007.

b. Applicant argues that Leach does not disclose the instantly claimed “wherein said power management data may be authenticated based on said geographical location.” This argument is persuasive. However, Applicant’s attention is directed to Eidson (U.S. Patent Application Publication No. 2004/0203868),

which discloses “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system in the system of Leach, because Eidson teaches a resultant increased reliability and security of the communication system.

c. Accordingly, claims 118 and 119 now stand rejected under 35 U.S.C. §103(a), as being unpatentable over Leach (U.S. Patent No. 6,954,814) in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

10. In response to Applicant’s amendment and remarks, concerning the 35 U.S.C. §102(e) rejection of claims 92-94, 101-103, 110-112 and 118-120, as being clearly anticipated by McMillin (U.S. Patent No. 7,027,773), Examiner notes the following:

a. As presented in the previous Office action, McMillin discloses a “wireless network of intelligent transceiver nodes which employ local processing and node-to-node data messaging to hand off messages from an origination point to a destination point” (col. 1, lines 10-16), wherein a “micro-controller 510 controls the transceiver 500 via an a/d converter 560 and a peripheral interface 570. The interface may be any communications interface such as a GPS receiver, GPS differential augmentation, wide area wireless network, local area wireless network, cellular modem, land line modem, satellite data modem, personal computer interface, PDA interface, or any other hardware or software system interface” (col. 10, lines 5-15), applicable to a power management environment (see, at least, col. 49, lines 33-44). Examiner notes that the effective filing date of McMillin (28 May 1999) predates the effective filing date of the instant application (22 March 2001), as supported by Applicant’s remarks in the response dated 20 September 2007.

b. Applicant argues that McMillin does not disclose the instantly claimed “wherein said power management data may be authenticated based on said geographical location.” This argument is persuasive. However, Applicant’s attention is directed to Eidson (U.S. Patent Application Publication No. 2004/0203868), which discloses “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the

measurement and the space/time parameters such that the certificate enables a determination of whether a set of alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system in the system of McMillin, because Eidson teaches a resultant increased reliability and security of the communication system.

c. Accordingly, claims 92-94, 101-103, 110-112 and 118-120 now stand rejected under 35 U.S.C. §103(a), as being unpatentable over McMillin (U.S. Patent No. 7,027,773) in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

II. In response to Applicant’s amendment and remarks, concerning the 35 U.S.C. §103(a) rejection of claims 95-100, 104-109, 113-117 and 121-124, as being unpatentable over McMillin (U.S. Patent No. 7,027,773), Examiner notes the following:

a. As presented in the previous Office action, as per claims 96-99, 105-108, 114-117, 122 and 123, although McMillin teaches Applicant’s invention substantially as instantly claimed, as noted above, and McMillin recognizes the availability of and uses GPS technology (see, at least, col. 17, lines 30-56), McMillin does not specifically use the communications interface to “determine a geographical location of the energy management device” by “RF triangulation.” In this regard, Applicant acknowledges, at page 15 of the instant specification, “cellular modems further provide the functionality to determine the geographic location of the IED using cellular RF triangulation,” such capability being a well known feature of cellular modems, as they are well known to be customarily used in the prior art to communicate wirelessly with mobile devices. Accordingly, since McMillin teaches using a cellular modem, it would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to use the known capability of cellular modems to determine the location of such modems, for the benefit and purpose of assuring accurate billing, monitoring and diagnosing system faults, etc.

Further as per claims 95, 100, 104, 109, 113, 121 and 124, Applicant acknowledges, at page 17 of the instant specification, that SLIP, PPP and TCP/IP are well-known Internet transport protocols.

b. Applicant argues that McMillin does not disclose the instantly claimed “wherein said power management data may be authenticated based on said geographical location.” This argument is persuasive. However, Applicant’s attention is directed to Eidson (U.S. Patent Application Publication No. 2004/0203868), which discloses “a system with methods and apparatus for authenticating measurements that resist human errors and attempts to render or present fraudulent measurements. A system according to the present teachings obtains a measurement and substantially contemporaneously determines a set of one or more space/time parameters for the measurement. The system includes methods and apparatus for generating a certificate in response to the measurement and the space/time parameters such that the certificate enables a determination of whether a set of

alleged data is the measurement obtained according to the space/time parameters” (the abstract). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such an authentication system in the system of McMillin, because Eidson teaches a resultant increased reliability and security of the communication system.

c. Accordingly, claims 95-100, 104-109, 113-117 and 121-124 now stand rejected under 35 U.S.C. §103(a), as being unpatentable over McMillin (U.S. Patent No. 7,027,773) in view of Eidson (U.S. Patent Application Publication No. 2004/0203868).

12. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. These documents are cited for their various teachings concerning utilization of location information, related to the source of transmitted messages/data, in the verification/authentication of such transmitted messages/data. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M.N. VON BUHR whose telephone number is (571)272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M.N. VON BUHR/
Primary Examiner, Art Unit 2121